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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/467,368	12/20/1999	PETER KAMP HANSEN	4324.224-US	2312
25908	7590	06/16/2004	EXAMINER	
NOVOZYMES NORTH AMERICA, INC. 500 FIFTH AVENUE SUITE 1600 NEW YORK, NY 10110			RAO, MANJUNATH N	
			ART UNIT	PAPER NUMBER
			1652	

DATE MAILED: 06/16/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Advisory Action**

Application No.

09/467,368

Applicant(s)

HANSEN ET AL.

Examiner

Manjunath N. Rao, Ph.D.

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--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 26 May 2004 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE. Therefore, further action by the applicant is required to avoid abandonment of this application. A proper reply to a final rejection under 37 CFR 1.113 may only be either: (1) a timely filed amendment which places the application in condition for allowance; (2) a timely filed Notice of Appeal (with appeal fee); or (3) a timely filed Request for Continued Examination (RCE) in compliance with 37 CFR 1.114.

**PERIOD FOR REPLY** [check either a) or b)]

- a) ☐ The period for reply expires \_\_\_\_\_ months from the mailing date of the final rejection.
- b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection. ONLY CHECK THIS BOX WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

1. ☒ A Notice of Appeal was filed on 26 May 2004. Appellant's Brief must be filed within the period set forth in 37 CFR 1.192(a), or any extension thereof (37 CFR 1.191(d)), to avoid dismissal of the appeal.
2. ☐ The proposed amendment(s) will not be entered because:
- (a) ☐ they raise new issues that would require further consideration and/or search (see NOTE below);
- (b) ☐ they raise the issue of new matter (see Note below);
- (c) ☐ they are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
- (d) ☐ they present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: \_\_\_\_\_.

3. ☐ Applicant's reply has overcome the following rejection(s): \_\_\_\_\_.
4. ☐ Newly proposed or amended claim(s) \_\_\_\_\_ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
5. ☒ The a) ☐ affidavit, b) ☐ exhibit, or c) ☒ request for reconsideration has been considered but does NOT place the application in condition for allowance because: See attached.
6. ☐ The affidavit or exhibit will NOT be considered because it is not directed SOLELY to issues which were newly raised by the Examiner in the final rejection.
7. ☒ For purposes of Appeal, the proposed amendment(s) a) ☐ will not be entered or b) ☒ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.

The status of the claim(s) is (or will be) as follows:

Claim(s) allowed: \_\_\_\_\_.

Claim(s) objected to: \_\_\_\_\_.

Claim(s) rejected: 72-90.

Claim(s) withdrawn from consideration: \_\_\_\_\_.

8. ☐ The drawing correction filed on \_\_\_\_\_ is a) ☐ approved or b) ☐ disapproved by the Examiner.
9. ☐ Note the attached Information Disclosure Statement(s) (PTO-1449) Paper No(s). \_\_\_\_\_.
10. ☐ Other: \_\_\_\_\_

Manjunath N. Rao, Ph.D.  
Primary Examiner  
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***Advisory Action***

Claims 72-90 are now currently pending in this application.

Applicant's request for reconsideration filed on 5-26-04 has been considered and entered. However, arguments presented traversing the rejection are still not persuasive to overcome the rejection. Hence the rejection of claims under 35 U.S.C. 103(a) as obvious over the recited references and the Double patenting rejection is maintained.

In response to the previous Office action, applicants have traversed the above rejection basically arguing that none of the cited references teach or suggest the use of thermostable xylanases in animal feed composition or that there would be any advantage to using a thermostable xylanase over a thermolabile xylanase in animal feed. Examiner respectfully disagrees with such an argument. While the references may not explicitly teach the advantages of using a thermostable enzyme over a thermolabile enzyme, such advantages would be readily obvious to those skilled in the art and Examiner has enumerated such advantages in his rejection. Therefore, the teachings by the reference of very same xylanase and the teachings for use of xylanases in general in animal feeds are enough to render the above invention *prima facie* obvious to those skilled in the art.

Applicants next argue against the rejection using the doctrine of "surprising and unexpected results". Applicants refer to a comparative experiment in which they compare a commercial enzyme with that of the invention and argue that the animal feed comprising the commercial enzyme at a dose of 400 FXU/kg gave a % fat digestion in the range of 72.1-74.3, while the animal feed comprising the present invention gave a % fat digestion in the range of 72.1-74.3 even though the xylanase was dosed at 100 or 200 FXU/kg and therefore the instant

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invention demonstrated superior property not predicted by prior art and that these results are surprising and unexpected. Examiner finds it difficult to accept the above results as surprising or unexpected. This is because it is not clear as to how a carbohydrase known to act on complex carbohydrates can increase % fat digestion or how the activity of the xylanase contributes towards fat digestion. Next, for sake of argument even if we accept that xylanase affected fat digestion, the results do not appear to be straight forward. For example, as applicants have not determined as to what would have been the %fat digestion values of commercial enzyme at lower doses, it is quite possible that the enzyme concentration of 400 FXU/kg may be a saturating concentration such that increased amounts of the enzyme had no effect on the % fat digestibility. In response to the above, applicant submits the results of example 7 shown in Table 2. Examiner has difficulty in concluding that the reference enzyme and the enzyme of the invention is very much different from each other. For example, chicks fed 400 FXU of the reference enzyme has a final body weight of 587 (g) compared to 597 for the same amount of the instant enzyme. Such small difference are not bound to be statistically significant to conclude that the two enzymes are entirely different.

Therefore Examiner has concluded that the results are neither surprising nor unexpected findings. Hence the above rejection is maintained.

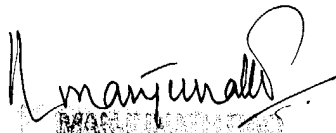
Examiner continues to maintain the rejection of claims 72-90 under Double Patenting rules (see previous Office action)

### ***Conclusion***

None of the claims are allowable.

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Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Manjunath N. Rao, Ph.D. whose telephone number is 571-272-0939. The Examiner can normally be reached on 7.00 a.m. to 3.30 p.m. If attempts to reach the examiner by telephone are unsuccessful, the Examiner's supervisor, Ponnathapura Achutamurthy can be reached on 571-272-0928. The fax phone numbers for the organization where this application or proceeding is assigned is 703-872-9306 for regular communications and for After Final communications. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 571-272-1600.

  
Manjunath N. Rao  
June 8, 2004